

**Supplemental Basis Statement  
Chapter 100 Definitions Regulations**

**Commenters**

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**1) Comment:** Although we appreciate that Maine wishes to simplify the implementation period, we are concerned that this approach may unintentionally exempt from regulation those new and modified sources which would be required to obtain preconstruction permits for other pollutants, and whose annual greenhouse gas emissions are over 75,000 tons but below 100,000 tons per year. These sources would be regulated under EPA's approach, beginning in January and continuing indefinitely, but apparently not under Maine's, which sets an initial 100,000 ton per year threshold, rather than EPA's initial 75,000 ton per year threshold. Maine, of course, may not set state implementation plan requirements which are less stringent than EPA's. See, e.g., 42 U.S.C. § 7410(a)(2)(J) (SIP must meet the requirements of the federal PSD program). (5) (6) (7)

**Response:** The Department agrees with the commenter and has amended Section 145 to state:

**"145. Significant emissions.** "Significant emissions" means any rate of emissions that would equal or exceed one hundred (100) tons per year of any regulated pollutant, ~~or~~ fifty (50) tons per year of VOC in the ozone transport region or for GHGs, significant emissions shall be:

a) Sources otherwise subject to PSD (for another regulated NSR pollutant) significant emissions shall be GHG PTE equal to or greater than 75,000 TPY (CO<sub>2</sub>e)

b) Beginning July 1<sup>st</sup>, 2011 new sources significant emissions shall be GHG PTE equal to or greater than 100,000 ."

**2) Comment:** The Department should include language in Chapter 100 that would link implementation of DEP's GHG permitting requirements to the corresponding federal requirements. By linking relevant terms in Chapter 100 to federal requirements, industry in Maine would be subject to the additional permitting costs, risks and processing time for GHG emissions only to the extent required by federal law. (1) (4)

**Response:** The Department has incorporated the federal PSD requirements for GHG as adopted in 40 CFR Parts 51, 52, 70 and 71 as amended on June 3, 2010. We believe that the proposed language in Chapter 100 closely mirrors the corresponding federal requirements, and have linked relevant terms to the corresponding federal requirements whenever practical. For example, the definition of CO<sub>2</sub> equivalent emissions in Section 27 of the proposed Chapter 100 directly references "Table A-1 (Global Warming Potentials) to subpart A of 40 C.F.R. part 98 (Mandatory Greenhouse Gas Reporting)" as amended on October 30, 2009.

**3) Comment:** The Department should add a “litigation” clause to its new rule, automatically suspending the effect of this greenhouse gas rule should court challenges (even ill-advised or frivolous) to the U.S. EPA’s underlying Tailoring Rule be initiated. Maine should not force businesses making permitting decisions to monitor the courts in order to avoid sudden, litigation-driven, changes in permit regulations. (1) (4)

**Response:** While the Department recognizes the Commenters’ concerns that litigation in the courts could result in changes to the federal GHG permitting regulations, it is impossible to address the extent and impact of any such changes *a priori*. Since the Department cannot automatically incorporate future changes to the federal GHG requirements, even those resulting from court decisions, we will initiate rulemaking in the event the GHG control requirements of the Tailoring Rule are amended, vacated or repealed at the federal level.

**4) Comment:** GHGs from combustion of biomass should be considered carbon neutral – a position that has been accepted by the Maine DEP in the past and is a principle that underlies Maine’s Regional Greenhouse Gas Initiative (RGGI) program and the DEP’s RGGI regulations. Further, based on Acting DEP Commissioner Nagusky’s comments at the November 18, 2010 hearing, MPPA understands that Maine DEP has been actively working with members of Maine’s Congressional delegation to urge EPA to revise its GHG Tailoring Rule requirements to exclude, discount or otherwise distinguish GHG emissions from combustion of biomass. MPPA urges the DEP to include exclusion for GHGs from combustion of biomass in the definition of “greenhouse gases” at Section 59 of Chapter 100, to the extent such an exclusion would not jeopardize EPA approval of the revised regulations as part of Maine’s SIP. If such a clear exemption could not be approved by EPA into Maine’s SIP, MPPA urges the Department to add the following sentence to Section 59 of Chapter 100:

“Greenhouse gases from the combustion of biomass are included in this definition to the extent required by the air permitting provisions of the CAA and implementing regulations.”  
(1) (3)

**Response:** The Department shares the Commenters’ concerns and also believes that GHG emissions from the combustion of biomass should, in most cases, be considered carbon neutral. Presently, EPA’s Tailoring rule did not exclude biomass emissions from the rule; and as such, we believe that an explicit exclusion for GHGs from the combustion of biomass would jeopardize the approval of the proposed amendments. Even if future federal rules exclude GHG emissions from the combustion of biomass, the Department would almost certainly need to amend any such exclusion to fully comport with these federal rules at a later date.

In lieu of a regulatory exemption, the Department’s preferred approach is to continue working with EPA to ensure the credible neutrality of biomass emissions, and to explicitly note that greenhouse gas emissions from the combustion of biomass are only included in the definition of GHG to the extent required by the CAA and federal rules. The Department has added the following note after Section 59:

"Note: The Department has included greenhouse gas emissions from the combustion of biomass in this definition to comply with the air permitting provisions of the CAA and implementing regulations. To the extent such emissions are exempted from federal permitting requirements through future changes in federal law, the Department intends to amend this Chapter accordingly."

The Department will consider biomass a renewable resource, whose use is consistent with state and federal policies to reduce dependence on fossil fuels, when determining BACT.

**5) Comment:** Chapter 100.27: The reference to "Table A-1 to 40 CFR subpart A of part 98 (Mandatory Greenhouse Gas Reporting) of this Chapter" appears to have been copied from 40 C.F.R. § 51.166 where "this Chapter" means "40 C.F.R.," not Chapter 100. The reference should probably be "Table A-1 (Global Warming Potentials) to subpart A of 40 C.F.R. part 98 (Mandatory Greenhouse Gas Reporting)." Consider also whether to add "as it may be revised by EPA from time to time" or, alternatively, "as of [date]," to avoid confusion if the table is later revised. (2)

**Response:** The Department agrees and has amended Section 27 to state:

"27. CO<sub>2</sub> equivalent emissions (CO<sub>2</sub>e)." "CO<sub>2</sub> equivalent emissions" means the amount of GHGs emitted, and computed by multiplying the mass amount of each emissions (TPY), for each of the six greenhouse gases in the pollutant GHGs, by the gas's associated global warming potential published at Table A-1 (Global Warming Potentials) to subpart A of 40 C.F.R. part 98 (Mandatory Greenhouse Gas Reporting) as amended on October 30, 2009, and summing the resultant value for each to compute a TPY CO<sub>2</sub>e."

**6) Comment:** Chapter 100.59: The phrase "the following gases, both individually and collectively" should probably be revised to "the aggregate group of the following gases," for consistency with the federal definition at 40 C.F.R. 51.166(b)(48)(i). (2)

**Response:** The Department agrees and has amended Section 59 to state:

"59. Greenhouse gases (GHGs). "Greenhouse gases" means the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride."

**7) Comment:** Chapter 100.79: The definition of "major modification" is broader than the federal definition because subparagraph (B)(i) will immediately capture certain sources that federal PSD will not regulate until July 2011. Specifically, an existing minor source that undergoes a modification that does not increase non-GHG pollutants sufficiently to trigger PSD but increases GHG emissions by 100,000 TPY CO<sub>2</sub>e. Federal PSD will not regulate such a modification before July 2011. See 40 C.F.R. § 51.166(b)(48)(iv). However, under Chapter 100.79.B.1, it would qualify as a major modification. This approach is more stringent than EPA's Tailoring Rule, and Maine is free to adopt more stringent requirements than federal regulations require, but EPA notes this additional stringency is not required as a matter of federal law. (2)

**Response:** The Department agrees and has amended Section 79(A) of the rule to state:

"A. Any modification that would result in a significant emissions increase of any regulated pollutant at an existing stationary source that emits or has potential to emit significant emissions of that pollutant prior to the modification; or

**8) Comment:** In determining whether a major modification has occurred, the definition in Chapter 100.79 refers to the term "stationary source" which is not defined in Chapter 100. (2)

**Response:** The terms "source" and "stationary source" are used interchangeably, and are defined at 100.51. In order to further clarify these terms, the Department has amended its definition of "source" as follows:

**"151. Source.** "Source" (Source or Stationary Source) ~~means any building, structure, facility, or installation which emits or may emit any regulated pollutant.~~ means all of the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person (or persons under common control) except the activities of any vessel. Pollutant-emitting activities shall be considered as part of the same industrial grouping if they belong to the same Major Group (i.e., which have the same two-digit code) as described in the Standard Industrial Classification Manual, 1972, as amended by the 1977 Supplement (U.S. Government Printing Office stock numbers 41014066 and 00340540176-0, respectively)."

**9) Comment:** Chapter 100.84 and 100.85.D: For clarity, EPA suggests that DEP revise the opening sentence of Chapter 100.84 to: ". . . a licensed emission increase of 4 TPY or more for any one regulated pollutant except GHGs, or 8 TPY or more for total regulated pollutants except GHGs," and a similar change to Chapter 100.85 .D. (2)

**Response:** The Department agrees and has amended Section 84 and Subsection 85(D) to state (in relevant part):

#### *Section 84*

**"84. Minor Modification.** "Minor Modification" means a Chapter 115 modification that involves a licensed emission increase of 4 tpy or more for any one regulated pollutant except GHGs, or 8 tpy or more for total regulated pollutants except for GHGs. A modification that is determined not to be a minor revision and:"

#### *Subsection 85(D)*

**"D.** a licensed emissions increase under four (4) tpy for any one regulated pollutant and under eight (8) tpy of total regulated pollutants, except for GHGs, and is determined not to be a Major or Minor Modification and is subject to licensing as defined in Chapter 115; or"

**10) Comment:** Chapter 100.88: For clarity purposes EPA suggests Maine make the following changes to the definition of "Modification or modified source:" (2)

a. "'Modification or modified source' means any physical change in or change in the method of operation of a source that would result in an emission increase of any regulated pollutant except that:"

**Response:** The Department agrees and has amended Section 88 of the rule to state (in relevant part):

**"88. Modification or modified source.** "Modification or modified source" means any physical change in or change in the method of operation of a source that would result in the emission increase of any regulated pollutant ~~not previously emitted~~, except that:"

**11) Comment:** The approach Maine has proposed to regulate greenhouse gases within the PSD permit program is different from EPA's Tailoring Rule. In the Tailoring Rule, EPA requires a two step approach when determining the applicability of GHG to the PSD program. First, a new, existing, or modified source must determine if GHG are a regulated NSR pollutant for the purposes of the PSD permit program. Once it is determined that GHG emissions from a source or modification are considered regulated, the second step is to determine the project's applicability within the traditional structure of the PSD permit program. (2)

**Response:** The Department agrees and has amended Section 145 of Chapter 100 to state:

**"145. Significant emissions.** "Significant emissions" means any rate of emissions that would equal or exceed one hundred (100) tons per year of any regulated pollutant, ~~or~~ fifty (50) tons per year of VOC in the ozone transport region or for GHGs, significant emissions shall be:

a) For sources otherwise subject to PSD (for another regulated NSR pollutant), GHG PTE equal to or greater than 75,000 TPY (CO<sub>2</sub>e) ; and

b) Beginning July 1, 2011, for new sources GHG PTE equal to or greater than 100,000 TPY (CO<sub>2</sub>e).

**12) Comment:** Maine should consider including PM<sub>2.5</sub> in the list of pollutants contained in the definition of "significant emission increase." a. "PM<sub>2.5</sub>: 10 TPY of direct PM<sub>2.5</sub> emissions; 40 TPY of sulfur dioxide emissions; TPY of nitrogen oxide emissions unless Maine demonstrates to the Administrator's satisfaction or EPA demonstrates that emissions of nitrogen oxides from sources in a specific area are not a significant contributor to that area's ambient PM<sub>2.5</sub> concentrations." (2)

**Response:** The Department recognizes the need to update its new source review (NSR) program to incorporate recent federal changes for the implementation of PM<sub>2.5</sub> NSR. On May 16, 2008, EPA issued its *Final Rule for Prevention of Significant Deterioration (PSD) for Particulate Matter Less than 2.5 Micrometers (PM<sub>2.5</sub>)- Increments, Significant Impact Levels (SILS) and Significant Monitoring Concentration (SMC)* (73 FR 28321). This rule addressed both

attainment NSR (prevention of significant deterioration) and NSR requirements for nonattainment areas. The rulemaking established a significant increase or rate of 10 tons per year for direct PM<sub>2.5</sub> emissions, and listed sulfur dioxide SO<sub>2</sub> and nitrogen oxides (NO<sub>x</sub>) as precursors of ambient PM<sub>2.5</sub>, defining 40 tpy or more of either precursor pollutant as "significant". Since incorporating these changes in the Maine NSR program will require amending the Department's Chapter 115 Major and Minor Source Air Emission License Regulations, the Department will amend the definition of "significant emissions increase" to include PM<sub>2.5</sub> at that point in time.

**13) Comment:** Chapter 100.139: By regulating GHGs individually (rather than as an aggregate), Maine's approach differs from federal PSD in a manner that in some cases is more stringent than necessary, and in some cases insufficiently stringent. While Chapter 100.139's definition of "regulated pollutant" includes the six GHGs, as explained above, Chapter 100.139 treats each of these GHGs as separate "regulated pollutants." In contrast, 40 C.F.R. §51.166(b)(48)(i) treats "greenhouse gases" as a single air pollutant comprised of an aggregate group. (1) (2) (4)

**Response:** The Department agrees with the Commenters and has amended Section 139(H) of its proposal to state:

"H. GHGs are a regulated pollutant, except that for the purposes of Chapter 115 and 140 of the Department's regulations, they are regulated pollutants only for the purposes of PSD and Title V major source requirements."

**14) Comment:** Maine should make the following clarification to Chapter 100, section 146.D: a. "In addition to Chapter 100.144.A, significant means, in reference to a net emission increase or the potential of a source to emit a pollutant subject to regulation under the CAA and that is not listed in Chapter 100.140.A or regulated under Title III of the CAA, any emission rate." (2)

**Response:** The Department agrees with the commenter and has amended its proposal to clarify that the pollutant referenced is subject to regulation under the Clean Air Act:

"D. In addition to Chapter 100.144.A, significant means, in reference to a net emission increase or the potential of a source to emit a pollutant subject to regulation under the CAA act that is not listed in Chapter 100.140.A or regulated under Title III of the CAA, any emission rate."

**15) Comment:** 10. Chapter 115.4.A.4.d applies BACT to "all regulated pollutants." This is more stringent than federal PSD requirements, which require BACT only for pollutants to be emitted in significant amounts (or, for a modification, a significant net emissions increase). See 40 C.F.R. 51.166(j)(2)-(3). (2)

**Response:** The Department agrees and has amended Section 139 of Chapter 100 to state:

"H. GHGs are a regulated pollutant, except that for the purposes of Chapter 115 and 140 of the Department's regulations, they are regulated pollutants only for the purposes of PSD and Title V major source requirements."

**16) Comment:** Item 114B in Ch 100 defines a Part 70 Major Source as any major stationary source that has the potential to emit 100 TPY or more of any single regulated pollutant. Since the intent of these revisions is to align the State's rule with EPA's GHG tailoring rule shouldn't there be some additional language that for GHG the PTE threshold is 100,000 TPY CO<sub>2</sub>e? Otherwise a lot of small facilities will find themselves becoming major sources. (1) (4) (8)

**Response:** The Department agrees and has amended Section 114(B) of Chapter 100 to state (in relevant part):

**“B.** Any major stationary source of air pollutants ~~or any group of stationary sources~~ as defined in Section 302 of the CAA that directly emits, or has the potential to emit 100 tpy or more of any single regulated pollutant or 100,000 tpy CO<sub>2</sub>e of GHGs (including any fugitive emissions of any such air pollutant, as determined by rule by the EPA). The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source for the purposes of Section 302(j) of the CAA or for the purposes of paragraph (C) of this definition, unless the stationary source belongs to one of the following categories of stationary sources:”